EXHIBIT B

CLAIMS ORGANIZED ACCORDING TO DEPENDENCY

1. (Twice amended) An isolated polynucleotide encoding a peptide of a promyostatin polypeptide, said peptide comprising a promyostatin signal peptide domain corresponding to amino acid residues about 1 to 20 of full length promyostatin polypeptide, and said peptide having signal peptide activity, or a polynucleotide complementary to said polynucleotide.

2. The polynucleotide of claim 1, wherein the promyostatin polypeptide is a vertebrate promyostatin polypeptide.

3. (Amended) The polynucleotide of claim 2, wherein the vertebrate promyostatin polypeptide is a mammalian promyostatin polypeptide, an avian promyostatin polypeptide, or a piscine promyostatin polypeptide.

4. (Amended) The polynucleotide of claim 1, wherein the promyostatin polypeptide comprises:

a human promyostatin polypeptide comprising an amino acid sequence as set forth in SEQ ID NO:2;

a murine promyostatin polypeptide comprising an amino acid sequence as set forth in SEQ ID NO:4;

a rat promyostatin polypeptide comprising an amino acid sequence as set forth in SEQ ID NO:6;

a chicken promyostatin polypeptide comprising an amino acid sequence as set forth in SEQ ID NO:8;

a baboon promyostatin polypeptide comprising an amino acid sequence as set forth in SEQ ID NO:10;

a bovine promyostatin polypeptide comprising an amino acid sequence as set forth in SEQ ID NO:12;

a porcine promyostatin polypeptide comprising an amino acid sequence as set forth in SEQ ID NO:14;

an ovine promyostatin polypeptide comprising an amino acid sequence as set forth in SEQ ID NO:16.

a turkey promyostatin polypeptide comprising an amino acid sequence as set forth in SEQ ID NO:18; or

a zebrafish promyostatin polypeptide comprising an amino acid sequence as set forth in SEQ ID NO:20.

15. (Amended) The polynucleotide of claim 1, wherein the promyostatin polypeptide is encoded by SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:5, SEQ ID NO:7, SEQ ID NO:9, SEQ ID NO:11, SEQ ID NO:13, SEQ ID NO:15, SEQ ID NO:17, or SEQ ID NO:19.

9. A vector, comprising a polynucleotide of claim 1.

10. The vector of claim 9, wherein said vector is an expression vector.

11. A host cell containing a polynucleotide of claim 1.

12. The host cell of claim 11, wherein said polynucleotide is in a vector.

19. (Amended) An isolated polynucleotide encoding a peptide of a promyostatin polypeptide, said peptide comprising a promyostatin myostatin domain corresponding to amino acid residues about 268 to 374 of a full length promyostatin polypeptide, and , said peptide having muscle growth inhibitory activity, or a polynucleotide complementary to said polynucleotide.

20. (Amended) The polynucleotide of claim 19, wherein the promyostatin polypeptide is a vertebrate promyostatin polypeptide.

21. (Amended) The polynucleotide of claim 20, wherein the vertebrate promyostatin polypeptide is a mammalian promyostatin polypeptide, an avian promyostatin polypeptide, or a piscine promyostatin polypeptide.

22. (Amended) The polynucleotide of claim 19, wherein the promyostatin myostatin domain comprises:

amino acid residues about 267 to 374 as set forth in SEQ ID NO:2;
amino acid residues about 268 to 375 as set forth in SEQ ID NO:4;
amino acid residues about 268 to 375 as set forth in SEQ ID NO:6;
amino acid residues about 267 to 374 as set forth in SEQ ID NO:8;
amino acid residues about 267 to 374 as set forth in SEQ ID NO:10;
amino acid residues about 267 to 374 as set forth in SEQ ID NO:12;
amino acid residues about 267 to 374 as set forth in SEQ ID NO:14;
amino acid residues about 267 to 374 as set forth in SEQ ID NO:16
amino acid residues about 267 to 374 as set forth in SEQ ID NO:18; or
amino acid residues about 267 to 374 as set forth in SEQ ID NO:20.

30. The polynucleotide of claim 19, wherein the promyostatin polypeptide comprises:

a human promyostatin polypeptide having an amino acid sequence as set forth in SEQ ID NO:2;

a murine promyostatin polypeptide having an amino acid sequence as set forth in SEQ ID NO:4;

a rat promyostatin polypeptide having an amino acid sequence as set forth in SEQ ID NO:6;

a chicken promyostatin polypeptide having an amino acid sequence as set forth in SEQ ID NO:8;

a baboon promyostatin polypeptide having an amino acid sequence as set forth in SEQ ID NO:10;

a bovine promyostatin polypeptide having an amino acid sequence as set forth in SEQ ID NO:12;

a porcine promyostatin polypeptide having an amino acid sequence as set forth in SEQ ID NO:14;

an ovine promyostatin polypeptide having an amino acid sequence as set forth in SEQ ID NO:16;

a turkey promyostatin polypeptide having an amino acid sequence as set forth in SEQ ID NO:18; or

a zebrafish promyostatin polypeptide having an amino acid sequence as set forth in SEQ ID NO:20.

31. The polynucleotide of claim 19, wherein the promyostatin polypeptide is encoded by SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:5, SEQ ID NO:7, SEQ ID NO:9, SEQ ID NO:11, SEQ ID NO:13, SEQ ID NO:15, SEQ ID NO:17, or SEQ ID NO:19.

27. A vector, comprising a polynucleotide of claim 19.

28. The vector of claim 27, wherein said vector is a viral vector.

29. A host cell containing the vector of claim 27.

32. A cell, which contains the polynucleotide of claim 19.

33. An isolated polynucleotide encoding a peptide of a promyostatin polypeptide, said peptide comprising a promyostatin prodomain corresponding to amino acid residues about 20 to 262 of a full length promyostatin polypeptide, and said peptide having myostatin binding activity, or a polynucleotide complementary to said polynucleotide.

34. The polynucleotide of claim 33, wherein the promyostatin polypeptide is a vertebrate promyostatin polypeptide.

35. The polynucleotide of claim 34, wherein the vertebrate promyostatin polypeptide is a mammalian promyostatin polypeptide, an avian promyostatin polypeptide, or a piscine promyostatin polypeptide.

36. The polynucleotide of claim 33, wherein the promyostatin polypeptide comprises:

a human promyostatin polypeptide having an amino acid sequence as set forth in SEQ ID NO:2;

a murine promyostatin polypeptide having an amino acid sequence as set forth in SEQ ID NO:4;

a rat promyostatin polypeptide having an amino acid sequence as set forth in SEQ ID NO:6;

a chicken promyostatin polypeptide having an amino acid sequence as set forth in SEQ ID NO:8;

a baboon promyostatin polypeptide having an amino acid sequence as set forth in SEQ ID NO:10;

a bovine promyostatin polypeptide having an amino acid sequence as set forth in SEQ ID NO:12;

a porcine promyostatin polypeptide having an amino acid sequence as set forth in SEQ ID NO:14;

an ovine promyostatin polypeptide having an amino acid sequence as set forth in SEQ ID NO:16;

a turkey promyostatin polypeptide having an amino acid sequence as set forth in SEQ ID NO:18; or

a zebrafish promyostatin polypeptide having an amino acid sequence as set forth in SEQ ID NO:20.

37. The polynucleotide of claim 33, wherein the promyostatin prodomain comprises:

amino acid residues about 20 to 262 as set forth in SEQ ID NO:2;

amino acid residues about 20 to 263 as set forth in SEQ ID NO:4;

amino acid residues about 20 to 263 as set forth in SEQ ID NO:6;

amino acid residues about 20 to 262 as set forth in SEQ ID NO:8;

amino acid residues about 20 to 262 as set forth in SEQ ID NO:10;

amino acid residues about 20 to 262 as set forth in SEQ ID NO:12;

amino acid residues about 20 to 262 as set forth in SEQ ID NO:14;

amino acid residues about 20 to 262 as set forth in SEQ ID NO:16;

amino acid residues about 20 to 262 as set forth in SEQ ID NO:18; or

amino acid residues about 20 to 262 as set forth in SEQ ID NO:20.

38. The polynucleotide of claim 34, which further comprises an amino acid sequence corresponding to amino acid residues about 1 to 20 of a full length promyostatin polypeptide.

39. A vector, comprising the polynucleotide of claim 33.

40. A cell, which contains the polynucleotide of claim 33.

26. (Amended) An isolated polynucleotide encoding a promyostatin myostatin domain, or a polynucleotide complementary to said polynucleotide, said myostatin domain having muscle growth inhibitory activity, and said myostatin domain comprising:

amino acid residues about 49 to 157 of SEQ ID NO:27; or

amino acid residues about 28 to 136 of SEQ ID NO:29.

41. An isolated polynucleotide, comprising SEQ ID NO:26 or SEQ ID NO:28.